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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/529,990	04/24/2000	KENICHI NAKAMA	Q58939	7259

7590

11/06/2002

SUGHRUE MION ZINN  
MACPEAK & SEAS  
2100 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20037

EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 11/06/2002

15

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/529,990

Applicant(s)

NAKAMA ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 17-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **RESPONSE TO AMENDMENT**

### ***WITHDRAWN REJECTIONS***

1. The objections to claim 4-7, 9, 11, and 12 of record in paper #8, page 2, paragraphs #2-4 have been withdrawn due to Applicant's amendment in paper #10.
2. The 35 U.S.C. 102/103 rejection of claims 1-12 as anticipated by or over Takematsu et al. (6,207,263) of record in paper #8, pages 4-5, paragraph #8 have been withdrawn due to Applicant's declaration in paper #11.

### ***REJECTIONS REPEATED***

3. The 35 U.S.C. 102 rejection of claims 1, 2, 4, and 6 as anticipated by Andrus (5,212,596) is repeated for reasons previously of record in paper #8, page 3, paragraph #6.
4. The 35 U.S.C. 102/103 rejection of claim 5 as anticipated by or over Andrus (5,212,596) is repeated for reasons previously of record in paper #8, page 4, paragraph #7.

### ***NEW REJECTIONS***

- ~~5. The text of those sections of Title 35, U.S. Code not included in this action can be~~  
found in a prior Office action.

### ***Claim Rejections - 35 USC § 102***

6. Claims 1-4, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Tomono et al. (5,377,044).

Tomono discloses a diffraction grating device comprising a transparent protective substrate, an adhesive layer, a silicon oxide layer, a light reflecting film, and a thin relief type resin pattern layer (figure 2). The resin pattern layer is made of a polymerization curing type resin such as a silicone (organopolysiloxane) type resin and has a thickness on the order of 0.1  $\mu\text{m}$  – 50  $\mu\text{m}$  (col. 2, lines 55-65). The adhesive layer is preferably a silicone-type (organopolysiloxane) flexible adhesive and can have a thickness of 200  $\mu\text{m}$  (col. 4, lines 34-36 and col. 7, lines 10-11). The protective substrate may be made of glass (col. 4, line 40). The resin pattern layer comprises grooves (angle) with a depth of 0.12  $\mu\text{m}$  (col. 6, line 58). As can be seen in figure 2 the light reflecting film conforms to the resin pattern layer. The ratio of thickness of the thickest layer to that of the thinnest layer of the two silicone (organopolysiloxane) layers is 4 to 2000.

***Claim Rejections - 35 USC § 102/103***

7. Claims 5, 8-10, 11, 17 and 18 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tomono et al. (5,377,044).

Although Tomono does not explicitly teach the limitations the coefficients of linear expansion of the respective layers change gradationally from the substrate toward the outermost layer, the gradationally change in refractive index from the substrate toward the outer most layer, the relationships set forth in claims 9, 10 and 17, or wherein the transmitted light has a wavelength from 380 to 2000 nm, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. two layers of organopolysiloxane and a transparent glass substrate) used to diffraction grating device.

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The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed coefficient of linear expansion, relationships, and transmitted light would obviously have been provided by the process disclosed by Tomono. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

***Claim Rejections - 35 USC § 103***

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tomono et al. (5,377,044).

Tomono discloses all the limitations of the instant invention except for the organopolysiloxane layers comprising methyltriethoxysilane or tetraethoxysilane. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use either methyltriethoxysilane or tetraethoxysilane, since it have been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. One of ordinary skill in the art would be able to recognize ability to use different organopolysiloxane, absent unexpected results.

***ANSWERS TO APPLICANT'S ARGUMENTS***

9. Applicant's arguments filed in paper #10 regarding the election/restriction requirement of record have been considered but are moot since the issue has already been addressed in the petition decision of record in paper #14, mailed September 30, 2002.

10. Applicant's arguments filed in paper #10 regarding the objections to the claims of record have been considered but are moot since the objections have been withdrawn.

While the Examiner maintains that the phrase "wherein in" is grammatically incorrect, it does not render the claim indefinite. Therefore, the objection is withdrawn.

11. Applicant's arguments filed in paper #10 regarding the Andrus (5,212,596) reference of record have been carefully considered but are deemed unpersuasive.

Applicant argues that a distinction between the present invention and Andrus is the recitation in present claim 1 that the projections have a dispersion of height of 1  $\mu\text{m}$  or less. A disclosure in the prior art which is within the claimed range anticipates the range, i.e. forming concave and convex shapes of 50  $\mu\text{m}$  or less (col. 6, line 59 to col. 7, line 11).

Applicant further argues that they do not *believe* that such a formation method will not produce a surface which satisfies the requirement of claim 1. Attorney's argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2129 and § 2144.03 for a discussion of admissions as prior art. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) ("An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of obviousness."). See MPEP § 716.01(c) for examples of attorney statements which are not evidence and which must be supported by an appropriate affidavit or declaration.

12. Applicant's arguments filed in paper #10 regarding the Takematsu (6,207,263) reference of record have been considered but are moot since the rejection has been withdrawn.

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***Conclusion***

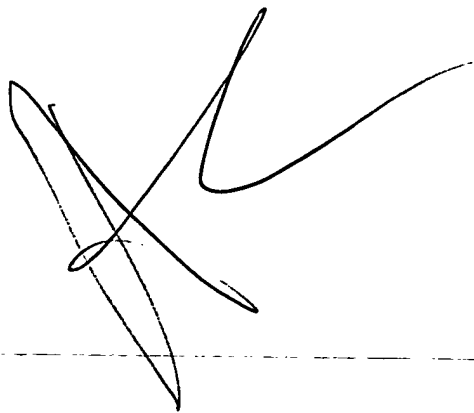
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays


If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Harold Pyon can be reached by dialing (703) 308-4251. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

10/30/02

A large, stylized handwritten signature, possibly reading 'Alicia Chevalier', is written over the signature line.

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

11/4/02